

TO: Dave Luzmoor
 FROM: Dolly A. Potter
 DATE: December 23, 1996
 RE: Emission Rate Comparisons

Solvay (CA-1/2 @ 325 TPY ore, CA-3 @ 162 TPH ore, and DR-5 @ 122 TPH ash)

Source	dscfm	Partic gn/dscf	Partic lb/ton	Partic PPH	MMBtu /hr	NO _x lb/MMBtu	CO lb/MMBtu
Baghse		0.015					
CA-1/2	150000	0.017	0.07	22.3	400	0.05	0.074
CA-3	54507	0.02	0.06	9.34	200	0.05	0.074
DR-5	34953	0.016	0.04	4.79	100	0.18	0.024

OCI (Ash increase of 989,880 TPY, trona of 1,865,880 TPY)

Source	Partic gn/dscf	Partic lb/ton	Partic PPH	MMBtu/hr	NO _x lb/MMBtu	CO lb/MMBtu
Baghouse	0.01					
Dryer ESP	0.017	0.06	4.6	103	0.05	1.11
Calciner ESP	0.017	0.06	10.0	230	0.05	0.83
Boilers 4&5*				400	0.1	

* Taking an operating restriction of 8760 hours per year total for the two boilers.

TG (Ash increase of 750,000 TPY, mine water of 9,855,888 TPY)

Source	dscfm	Partic gn/dscf	Partic lb/ton	Partic PPH	MM Btu/hr	NOX lb/MMBtu	CO lb/MMBtu
Baghouse		0.01					
Dryer ESP	100000	0.01	0.04	3.35	120	0.05	0.09
Boiler					431.6	0.05	0.09

Solvay Expansion II Emission Estimates (1.2 MM TPY ash, 2.04 MM TPY ore)

Source	dscfm*	Partic gn/dscf	Partic lb/ton	Partic PPH	MMBtu /hr	NO _x lb/MMBtu	CO lb/MMBtu
Baghse		0.01					
CA-4	86047	0.015	0.05	11.06	400	0.05	0.074
DR-6	42184	0.01	0.03	3.62	200	0.15	?

dscfm assumes: CA-4 @ 255,000 acfm @ 375 F @ 23.84 " Hg @ 33 % moisture = 86047 dscfm
 DR-5 @ 130,000 acfm @ 350 F @ 23.84 "Hg @ 37.5 % moisture = 42184 dscfm

cc: RLC, JPM, PCJ, Andy Sass, Aileen Castaneda